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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/519,846

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Sung Yoon Kim

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02/27/2009

OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER

SCHWARTZ, DARREN B

ART UNIT

PAPER NUMBER

2435

NOTIFICATION DATE

DELIVERY MODE

02/27/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
oblonpat@oblon.com  
jgardner@oblon.com

<i>Office Action Summary</i>	Application No.	Applicant(s)	
	10/519,846	KIM ET AL.	
	Examiner	Art Unit	
	DARREN SCHWARTZ	2435	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2008.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 and 23-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 and 23-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

Applicant amends claims 1-3, 5-6, 8-20 and 23-25. Claims 1-20 and 23-25 are presented for examination.

### *Response to Arguments*

Applicant's arguments with respect to claims 1-20 and 23-25 have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-9, 12, 19, 20 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Oho et al (U.S. Pat Pub 2002/0184515 A1), hereinafter referred to as Oho.

Re claim 1: Oho teaches an information device (Abstract: lines 12-14), comprising:

means for storing an encrypted content whose use requires a license (¶¶6-¶¶7; Fig 68);

means for storing the license, the license including grouped device identification information for grouping and identifying a plurality of information devices that includes the information device, the plurality of information devices being authorized to decrypt the encrypted content (Figs: 7a & 7b; ¶¶7; ¶¶20);

means for storing user data including (a) the grouped device identification information, (b) key information commonly provided to a device group that includes the plurality of information devices, and (c) a group identifier provided to the device group, wherein the means for storing the user data stores the grouped device identification information and the key information together with the group identifier (Figs: 7a & 7b; ¶109-¶110); and

means for reading out the grouped device identification information from the license, for reading out the key information from the user data based on the grouped device identification information, and for decrypting the encrypted content, based on the key information (Fig 12, particularly elts: S212, S213, S217-S220; ¶7; ¶147-¶148).

Re claim 2: Oho teaches the means for storing the encrypted content associates license identification information [license information identifier] for identifying the license to the encrypted content, the license including the license identification information and the grouped device identification information (Figs 7a, 7b and 67B; ¶313).

Re claim 3: Oho teaches the means for reading out reads out the license identification information the grouped device identification information is associated with the read license identification information; and the key information is associated with the read grouped device identification information (Fig 7a & 7b; ¶129; ¶138).

Re claim 4: Oho teaches means for requesting an information server to register the device group in the information server (¶109).

Re claim 5: Oho teaches means for requesting the information server to register the information device (§55), and to submit the grouped device identification information and the key information to the information device (§18; §139).

Re claim 6: Oho teaches means for storing unique device identification information for identifying the information device from other information devices structurally similar to the information device (§46); and means for requesting the information server to register in the information server the unique device identification information (§40; §46; §109).

Re claim 7: Oho teaches means for producing the unique device identification information (§110-§111).

Re claim 8: Oho teaches means for requesting the information server to delete from the information server the unique device identification information (§67; §233; §235).

Re claim 9: Oho teaches the device group, includes a plurality of information devices owned by one user (§111).

Re claim 12: Oho teaches the encrypted content, includes at lest one of text data, still image data, moving image data, or voice data (§105).

Re claim 19: Oho teaches an information processing system, comprising:  
an information server (§2; §172); and  
an information device configured to receive a service from the information server through communication lines (§7), wherein

the information server includes means for registering the information device according to a service registration request from the information device (§40; §46), for associating grouped device identification information and key information to a group identifier (§120-§121; §176), for registering the grouped device identification information and the key information (§120-§121; §176), and for providing the grouped device identification information and the key information to all information devices in a device group (§120-§121; §176), the grouped device identification information grouping and identifying a plurality of the information device including the information device, the key information associated with an encrypted content (§120-§121; §176), and

the information device (Abstract: lines 12-14) includes:

means for storing the encrypted content (§6-§7; Fig 68);

means for storing a license, the license including the grouped device identification information (Figs: 7a & 7b; §7; §20);

means for storing user data that includes the grouped device identification information and the key information, which are provided from the information server, and the group identifier, the means for storing the user data storing the grouped device identification information and the key information together with the group identifier (Figs: 7a & 7b; §109-§110); and

means for reading out the grouped device identification information from the license, for reading out the key information from the user data based on the grouped device identification information, and for decrypting the encrypted content based on the key information (Fig 12, particularly elts: S212, S213, S217-S220; §7; §147-§148).

Re claim 20: Claim 20 is rejected under similar grounds as those provided in claim 1.

Re claim 23: Claim 23 is rejected under similar grounds as those provided in claim 1.

*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oho et al (U.S. Pat Pub 2002/0184515 A1), hereinafter referred to as Oho, in view of Tanaka et al (U.S. Pat Pub 2002/0114466 A1), hereinafter referred to as Tanaka.

Re claim 10: Oho teaches all the limitations of claim 1 as previously discussed. Tanaka teaches the key information, corresponds to a device node key allocated to the device group, which is a node in a bottom layer among a plurality of node keys in a hierarchical tree structure, wherein each of the node keys is encrypted and corresponds to a different node in the hierarchical tree structure, which branches off from a top layer to the bottom layer, the encrypted content, is multiply encrypted by each of the node keys on a path in the hierarchical tree structure from the device node key to a root key, the root key being a node key in the top layer of the hierarchical tree structure, and the means for reading out sequentially decrypts each of the node keys on the path from the

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bottom layer to the top layer in the hierarchical tree structure, using the key information as the device node key to obtain the root key, and then decrypts the encrypted content by using the obtained root key (Figs 12, 18A, 18B & 18C; ¶137-¶140).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Oho with the teachings of Tanaka, for the purpose of providing a key encrypting key system for protecting multimedia content, as is well known in the art.

Re claim 11: The combination of Oho and Tanaka teaches the encrypted content, is encrypted by a content key that is encrypted by the root key, and the means for reading out decrypts the content key by using the root key, and then decrypts the encrypted content using the decrypted content key (Tanaka: ¶11).

3. Claims 13, 14, 16-18, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oho et al (U.S. Pat Pub 2002/0184515 A1), hereinafter referred to as Oho, in view of Alain et al (U.S. Pat Pub 2003/0110131 A1), hereinafter referred to as Alain.

Re claim 13: Oho teaches an information server (¶2; ¶172), comprising:

means for registering the one of a plurality of information devices according to a service registration request from the one of the information devices (¶40; ¶46; ¶47; ¶54; ¶55; ¶62), for associating grouped device identification information and key information to a group identifier, for registering the grouped device identification information (¶120-¶121; ¶176-¶177) and the key information (¶108).



However, Alain teaches for providing the grouped device identification information and the key information to all information devices in a device group including the plurality of information devices, the grouped device identification information grouping and identifying the plurality of information devices, the key information associated with an encrypted content (§13; §15; §17).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Oho with the teachings of Alain, for the purpose of providing access control to a plurality of devices held by a single entity, as taught by Alain.

The combination of Oho and Alain teaches:

means for receiving a license request from the one of the information devices, the license request including the grouped device identification information (Oho: §18); and

means for determining whether to charge for providing a license from the information server, based on whether the grouped device identification information is registered by the means for registering (Oho: §123; §356).

Re claim 14: The combination of Oho and Alain teaches means for extracting device identification that identifies the one of the information devices from a device registration request from the one of the information devices, for associating the device identification information with the group identifier, and for registering the device identification information according to the device registration request (Oho: §40; Fig 19A).

Re claim 16: The combination of Oho and Alain teaches means for extracting deletes the device identification information, which is specified by a device registration deletion request from the one of the information devices information (Oho: ¶67; ¶233; ¶235).

Re claim 17: The combination of Oho and Alain teaches means for providing the license specified by the license request to the one of the information devices according to the license request (Oho: ¶123; ¶328; ¶356); and means for extracting the grouped device identification information from the license request and for determining whether to charge for providing the license from the means for providing, based on whether the extracted grouped device identification information is registered by the means for registering (Oho: ¶123; ¶328; ¶356).

Re claim 18: The combination of Oho and Alain teaches the device group includes a plurality of information devices owned by one user (Oho: ¶111).

Re claim 24: Claim 24 is rejected under similar grounds as those provided in claim 13.

Re claim 25: Claim 25 is rejected under similar grounds as those provided in claim 13.

4. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oho et al (U.S. Pat Pub 2002/0184515 A1), hereinafter referred to as Oho, in view of Alain et al (U.S. Pat Pub 2003/0110131 A1), hereinafter referred to as Alain, in further view of O'Neil (U.S. Pat Pub 2002/0085490 A1), hereinafter referred to as O'Neil.

Re claim 15: The combination of Oho and Alain teaches all the limitations of claim 14 as previously discussed.

However, O'Neil teaches after the number of device identification information registered in one device group reaches a predetermined number, the device registration management means for extracting refuses a device registration request from a new information device belonging to the device group, after a number of information devices that correspond to device identification information that is registered in the device group reaches a predetermined number (§6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Oho and Alain with the teachings of O'Neil, for the purpose of preventing too many devices from entering a group and degrading group communication performance.

### *Conclusion*

Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the text of the passage taught by the prior art or disclosed by the examiner.

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In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DARREN SCHWARTZ whose telephone number is (571)270-3850. The examiner can normally be reached on 8am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (571)272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. S./

Examiner, Art Unit 2435

/Kimyen Vu/

Supervisory Patent Examiner, Art Unit 2435